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ABSTRACT

Postsecondary vocational education in California has been offered almost exclusively in the community colleges, using various short-term certification programs, apprenticeship education, two-year occupational programs leading to an associate of arts degree, and courses designed to upgrade employment and to lead to job advancement. In the 1972-73 period more than 59 percent (538,790) of the total community colleges enrollment (922,065) pursued some occupational training goal. A broad range of activities during the year are described for the following occupational areas: agriculture, distributive trades, banking and finance, health, home economics, office (including professional association, business education management conferences, volunteer income tax assistance program, and competency-based instructional programs), technical, trade and industrial, public service, and criminal justice. The operation of Community College Occupational Program Evaluation System (COPES), is briefly described, a list of ongoing and completed research projects provided. (SA)

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A YEAR OF ACCOMPLISHMENTS IN OCCUPATIONAL EDUCATION IN THE CALIFORNIA COMMUNITY COLLEGES

1972/73

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by

Sidney W. Brossman, Chancellor

California Community Colleges

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A YEAR OF ACCOMPLISHMENTS IN OCCUPATIONAL EDUCATION IN THE CALIFORNIA COMMUNITY COLLEGES

Sidney W. Brossman, Chancellor
California Community Colleges

Postsecondary vocational education in California has been offered almost exclusively in the Community Colleges. By state law one of the principal purposes of the Community Colleges is to provide vocational training. Other purposes are to offer courses for those planning to transfer to four-year institutions of higher education and to provide general education courses.

Occupational education in the Community Colleges has been planned to provide the knowledge and skills needed by a student to obtain a job and to keep it. This objective has been carried out through short-term certification programs, apprenticeship education, two-year occupational programs leading to an associate of arts degree, and courses designed to upgrade employment and to lead to job advancement.

Vocational training has been so combined with the other purposes of the Community College that students pursuing vocational education objectives have been indistinguishable from students pursuing transfer programs or general programs.

The importance of postsecondary vocational education to the Community Colleges becomes more clear considering that of the total 1972-73 California Community Colleges enrollment of 922,065, more than 59 percent (538,790) of the enrollees pursued some occupational training goal. Approximately 35 percent of the students were engaged in transfer programs, and the remainder obtained general education benefits.

There are 96 Community College campuses in California, concentrated in

metropolitan areas (San Francisco Bay area--18, Los Angeles area--24, San Diego area--7). The Community Colleges in California comprise the world's largest system of institutions of higher education.

Occupational education in the Community Colleges is grouped in ten general areas. Accomplishments in each of these areas are discussed in light of goals and objectives for 1972-73 as follows.

Agricultural Education

Agricultural education courses are offered by 41 Community Colleges currently offering this varied program. Enrollment projected for the program area in the 41 colleges was 13,722; however, it is estimated that enrollments will reach 14,066, an increase of 1,220 over 1971-72.

Three in-service education workshops for instructors were conducted with California State Polytechnic University during the 1972-73 for updating curricula, articulation, skill improvement, and to increase knowledge in fields of ornamental horticulture, soils, agri-business, and power mechanics. There were also four separate workshops offered prior to the California Agriculture Teachers Association summer conference. The objective was to have 30 instructors attend these workshops, and actual attendance was 70.

Work experience is recognized more each year as an integral part of an occupational program. This is as true in agriculture as in other fields. Agriculture departments of Community Colleges are convinced that more emphasis must be directed toward work experience. Anticipation was for 10 work experience programs for 1972-73 with 500 students participating; however, actual attainment was 20 programs with 1,485 students participating.

Distributive Education

Distributive occupations educational programs in the Community Colleges were offered at every campus in the state. Estimated enrollments in 190 programs

was 59,600, an increase of 4,189 enrollements over the previous year of 55,811.

Banking and Finance Programs

The fourth year joint efforts of the California-American Institute of Banking Board of Directors and the Chancellor's Office of the California Community Colleges in designing and implementing banking and finance programs proved to be most productive. Fifty-four Community Colleges have implemented the program and will offer the associate degree in banking and finance and three specialized certificates and achievements. Seven more Community Colleges have Letters of Understanding with the American Institute of Banking which will enable students to use college courses to obtain National Banking Certifications. Ten additional Community Colleges are in the process of establishing the banking and finance program to be operational in the fall of 1973.

Thus, 71 of the 96 Community Colleges in California will be offering the banking and finance program of the American Institute of Banking with the opening of the 1973 academic year.

Health Occupations Education

The health occupations programs in the 96 California Community Colleges cover 44 separate occupations. This number has increased from 30 in 1971. The programs are conducted mainly during the day for postsecondary and adult students. Extended-day programs for supplemental education are well attended. Several full programs to meet local needs are conducted in extended-day, e.g., nurses aide, limited X-ray technology, medical records technician, and emergency medical technician. The dental assisting, dental hygiene, and dental laboratory programs offer extended-day education for working practitioners. Respiratory therapy programs offer extended-day education to upgrade practitioners at the aide level. Medical assisting programs offer continuing education to practitioners who desire education to meet national certification standards.

All of the 55 registered nursing programs in participating colleges offer continuing education on a regular basis for improvement of current practices. All of 55 RN and 63 license vocational nursing (LVN) programs make provisions for upward articulation with four-year colleges and universities. All the radiologic technology programs offer extended-day education upon demand from licensed practitioners and paramedical persons requiring radiologic safety education.

The following trend demonstrates some growth and changes in numbers of programs offered.

Program	1969	1971	1972
Dental Assisting	28	33	34
Dental Hygiene	3	8	9
Respiratory Therapy	3	20	21
Medical Assisting	21	*37	35
Associate Degree Nursing (RN)	44	54	55
Licensed Vocational Nursing (LVN)	56	63	63
Radiologic Technician	13	25	24
Emergency Medical Technician	0	6	25
Psychiatric Technician	0	14	15
Prosthetics-Orothotics	1	2	4
Physician Assistant	0	2	4

*Includes cooperative hospital extended-day programs.

Other program offerings have emerged from local demands, e.g., speech therapist technician, intensive care unit monitor, cardio-pulmonary technician, mental retardation specialist, bio-medical communications, medical laboratory assistant, community health aide, EEG-EKG technician, medical records technician/nursing home management, paraoptometrics, and bio-medical technology. These are not extensive in the number of programs, but show a trend for further specialization of health care technologies and assistants demanded by the medical professions.

These programs are offered only when the demand is great, and they are not perpetuated beyond that point of need. Some health occupations programs have been expanded, while others have been curtailed as the result of the

recommendations of local committees through regional planning.

There are 341 program offerings in health occupations programs in the 96 California Community Colleges. There were 7,088 full-time students enrolled in the two-year associate degree RN programs in 55 Community Colleges in September 1972. There were approximately 5,632 full-time LVN students enrolled in September 1972. Approximately 2,500 associate degree nursing students graduated in July 1973, and approximately 4,112 LVN students completed their programs in August 1973.

Core curriculums are being developed in the majority of the nursing programs with the cooperation of the faculties from the life sciences and behavioral sciences divisions. These health science cores are satisfactory, but much necessary coordination is still being structured to curtail duplication of teaching by several faculty groups.

Home Economics Occupational Education

In the area of home economics occupations the Community Colleges in 1972-73 have increased the availability of home economics related occupational programs in at least ten Community College districts. These programs represent development in the areas of child care and guidance, clothing management, production and services, food management, production and services, and home furnishings, production and services. The objective was exceeded by actual development of 21 programs in 13 Community College districts.

A major objective for 1972-73 was to evaluate at least 25% of each type of existing home economics occupational education programs, to include those for disadvantaged and handicapped persons. The achievement of 24.2% was accomplished through evaluation on a self-appraisal basis as well as a visiting team evaluation by participating in the COPES Project (Community College Occupational Programs Evaluation System) of the Chancellor's Office of the California Community Colleges.

Enrollments in home economics occupational education programs for 1971-72 were 18,143. Projected for 1972-73 are 18,596 or an increase of 453.

Office Occupations Education

The California Community Colleges had an enrollment of 147,984 in 1971-72 and a projected enrollment of 153,903 for 1972-73, an increase of 5,919.

Professional Association. A long range planning committee served as an advisory board in the program area of business education. Because the membership of this committee is drawn from the California Business Education Association, the membership includes both secondary and high school representatives. This unique blending made it possible to have pre-, concurrent and post evaluations of all conferences and workshops offered by the Chancellor's Office throughout the year.

As an example, ten topical workshops in business education were conducted in California in 1972-73, and members of the long-range planning committee served as recorders at each conference. During the post workshops evaluation meeting, these recorders identified alternative contents and procedures for the 1973-74 workshops and seminars.

Business Education Management Conferences. The Chancellor's Office continued participation in the design and operation of the business education management conferences. As in previous years, a northern and southern setting were conference sites, with representatives from 60 California Community Colleges in attendance.

The goal of the conference programs was to provide orientation and training in program management for business education chairmen of the Community Colleges. The conference program included such topics as Vocational Education Act dollars in business education, business education programs for disadvantaged, business programs for physically handicapped, legal communications practices as

related to curriculum, Chancellor's Office program approval procedures, articulation considerations for competency-based office education, planning teacher workshops for 1972-73, and business education within the district plan of the Vocational Education Act.

Volunteer Income Tax Assistance Program. The United States Internal Revenue Service, San Francisco and Los Angeles District Offices, initiated a Volunteer Income Tax Assistance Program as a joint venture with the Chancellor's Office. Through this program Community College students were trained as tax preparers assistants. When the training was completed, the assisters went out on a voluntary basis to help the poor, elderly and handicapped in filing their income tax returns. The success of the program, as viewed by Internal Revenue Service, was so noteworthy that IRS has decided to use only Community College students in the Volunterr Income Tax Assistance Program for 1973-74.

A major factor strengthening the impact of this program hinges on the endorsement of this program by the California Certified Public Accountants Society. Some local chapters of the Society have agreed to provide instructors at Community Colleges and backup technical services at Volunteer Income Tax Assistance Centers.

Competency-based Instructional Programs for Office Education. The Chancellor's Office, using Vocational Education Funds, assisted the six Community Colleges of the Northern California Area Planning Committee for Educational Programs in implementing a project directed toward using a concerted degree of staff time and other resources to improve the multi-media capability for instruction in the office education program area. All materials developed in the project will be shared with all the Community Colleges participating.

Technical Occupations Education

The Community Colleges experienced growth in technical occupations education during 1972-73 as in other occupational education areas. Enrollments of

51,742 were reported for 1971-72, and it is estimated that the enrollment this year will be 54,329, or an increase of 2587 over last year.

Surveys were made of a five-county area in Southern California regarding employment operations and availability of educational programs within the fields of environmental technology. Although employment prospects are not particularly high, the study showed need for qualified people in noise abatement, environmental impact studies, and occupational safety and health.

Trade and Industrial Occupations Education

The Community Colleges also experienced an increase in enrollment in the areas of trade and industrial occupations education. Estimated enrollment for 1972-73 is 174,031, an increase of 8,287 over the reported enrollment of 165,744 of 1971-72.

Three instructional manuals were prepared in the construction supervision and inspection series: architectural, plumbing and piping, and air conditioning, heating and ventilating. These manuals bring the total to six available in this series.

Workshops for automotive instructors continue to be popular. Of particular interest are those relating to emission controls and devices, import cars, and disc brakes. Five separate one-week workshops dealing with these subjects have been planned and conducted following the completion of the 1972-73 academic year.

Public Service Occupations Education

Public service occupations educational programs have continued to show growth. Enrollments in 1971-72 were 20,886. This year,1972-73, enrollments are 21,408 or an increase of 522.

Several objectives were implemented in public service occupations for the Community Colleges. Materials were developed to increase the stability, effectiveness, and uniformity of public service programs by providing guidelines

and course content in library/media, social service, and recreation. Some articulation of occupational programs with four-year professional schools was accomplished to form a career ladder. Although only one agreement had been planned, two were achieved in the areas of recreation and government management. The number of multidiscipline programs was also increased to meet current needs, and a human services core program was developed. Social service programs were combined with recreation to offer an option in recreation therapy activity leader. Five Community Colleges are developing this program. Five regional workshops were held with 67 educators attending.

Criminal Justice Occupations Education

The criminal justice education program in the Community Colleges is located on 78 campuses, an increase of four over last year. These campuses reported an enrollment of 41,569 for 1971-72, and it is estimated there will be an enrollment of 42,608 for 1972-73, an increase of 1,039.

Phase II of the new criminal justice curriculum for Community Colleges was achieved, and an additional instructional manual was completed. The Chancellor's Office of the California Community Colleges continued to distribute instructional material. Approximately 13,500 copies of these manuals were distributed state and nationwide. During the first three months of this year 1,000 copies of the Core Curriculum, Phase I, were distributed state and nationwide.

Occupational Work Experience Education

Occupational work experience education enrollments reported for 1971-72 were 12,024, and it is estimated that this number will have increased this year to 12,625, or an increase of 601. Work experience education is an instructional method combining classroom instruction with corresponding part-time on-the-job training as a means of relating classroom instruction to the actual world of work. The California Community Colleges have developed contractual agreements between employers and the colleges requiring the development of student learning

objectives for each on-the-job work station. The student acquires specific measurable skills while employed at one of the work stations.

Twenty-one Community College districts have extensive occupational work experience educational programs.

The Community College Occupational Program Evaluation System, (COPES)

COPES iw now two years old. It owes its existence to the vision of a number of California Community College leaders. It owes its growth and present stature to the dedicated efforts of those leaders and the enthusiastic participation of literally thousands of other persons. Its goal: to improve the quality and availability of occupational education in California Community Colleges.

Two objectives toward attainment of the goal were achieved in the project's first year. A system with procedures and instructments was developed and refined for objectively evaluating occupational education programs in California Community Colleges. Six teams of professionals were developed to implement the system.

For 1972-73, a much more ambitious program was implemented. In relation to the overall system, three objectives were reached: further refinement, development of additional implementing teams and involvement of the Chancellor's Office in field test coordination. In addition, a subsystem was developed for evaluating programs and services for the disadvantaged and handicapped, and team members oriented in application. Assessment was made of the status of consumer and homemaking education in representative California Community Colleges. Major strengths and critical needs for improvement in California Community College occupationai education were identified and research priorities proposed.

Willing, able and committed men and women from throughout the state, both on Community College campuses and in their communities, have made these accomplishments possible. These highly cooperative participants include faculty, counselors, administrators and students, as well as advisory committee members and other

community leaders. Most active were the COPES team members who conducted campus visits, together with guest participants and Chancellor's Office participants.

In all, since its inception, COPES has been applied at 31 California Community Colleges. The resulting evidence is that COPES can have, and has had, strong impact in terms of realization of the project's evaluative goals. The students for whom the colleges exist and the communities they serve will be the beneficiaries.

The real test of COPES is the reaction of the Community Colleges to its application and their subsequent action as a result of the application.

Solid favorable evidence of reaction is seen in the ratings given to COPES campus visits by representatives of the colleges. Five hundred and sixteen respondents at 15 colleges visited during 1972-73 rated the teams' work overwhelmingly productive--76 percent either "good" or "excellent" (39 percent for the former, 37 percent for the latter). Only 1 percent termed the site visit "poor" and only 6 percent "below expectations." "Acceptable" ratings totaled 17 percent.

COPES appears to have won a substantial place for itself on the basis of its first two years. Already, for 1973-74, 20 California Community Colleges have requested application of the COPES evaluation system. In addition, interest has been expressed in adapting procedures and instruments for evaluation of occupational program "clusters," much as was accomplished during 1972-73 for consumer and homemaking education and for programs and services for the disadvantaged and handicapped.

The mission of COPES is far from completed. Opportunities for benefiting occupational education in California Community Colleges still lie ahead, and there are many challenges to assure that the opportunities are fully realized.

Professional Development

Professional Development programs for Community College personnel have

ranged through several types and categories of training.

In agricultural education there were three in-service education workshops for instructors conducted with California State Polytechnic University during the 1972-73 for updating curricula, articulation, skill improvement, and to increase knowledge in fields of ornamental horticulture, soils, agri-business, and power mechanics. There were also four separate workshops offered prior to the California Agriculture Teachers' Association summer conference.

In home economics education the Annual Conference on Home Economics in the California Community Colleges provided in-service training for 100 instructors, administrators, and deans of occupational education on "Expanding with the Electronic Age New Student Populations." This program explored the media of instructional television and radio as expeditious ways into the community. Presentations were taped and placed in the resource center of SHARE (Services to Home Economics Activities and Resources in Education) for distribution.

Public service occupations programs provided personnel development in the form of workshops. In-service workshops were provided for instructors of social service programs. These workshops were conducted at Cabrillo, West Valley, and Golden West Colleges, with 150 participating instructors.

Fifteen criminal justice occupations in-service instructor training programs were conducted at locations throughout the state by the Chancellor's Office in cooperation with the University of California at Los Angeles. 433 personnel completed this instructor training program.

Research

The Chancellor's Office of the California Community Colleges sponsored and funded major research activities in the amount of $348,743 during 1972-73, which includes the following projects:

Titles	Principal Investigator and Institution
Development/Refinement of the Community College Occupational Programs Evaluation System, COPES	Chancellor's Office of the California Community Colleges and Foothill Community College District
Establishing Occupational Education Research Priorities in California Community Colleges	Chancellor's Office of the California Community Colleges and Foothill Community College District
Synthesis of Handicapped and Disadvantaged Vocational Education Model into COPES Design	Chancellor's Office of the California Community Colleges and Foothill Community College District
Development of an Audio-Visual Self-Identification Model for Use in Vocational Counseling	Arthur Cherdack, Project Director Los Angeles Community College District (East Los Angeles College)
Research on Intrinsic-Extrinsic Motivation Concepts as Applied to Selected Vocational Instructional Programs	Hilding Nelson, Project Director Mt. San Jacinto Community College District
Field Test of a Vocational Research Training Model that Integrates Management and Evaluation Concepts	Otto A. Heinkel, Project Director San Diego Community College District
Priority Determination for Vocational Education through a Formal Needs Assessment Process	Otto A. Heinkel, Project Director San Diego Community College District
Selection & Testing of a Systems Planning Model by Community College Vocational Educators and Research Personnel	Lorine Aughinbaugh, Thomas MacMillan, and Paul Preising, Project Coordinators Shasta-Tehama-Trinity Community College District
Labor Market Analysis Survey for Handicapped Students	John McKinley, Project Director South County Community College District
Manpower Projection Model System: Phase II	William H. Lawson and Odessa Dubinsky, Project Coordinators Ventura County Office of Education and the Ventura Community College District
Chartering, a developmental research project concerned with improving the understanding, communications, and agreements pertaining to levels of performance among related agencies concerning occupational education	Chancellor's Office of the California Community Colleges, State Department of Education, University of California at Los Angeles, Coast Community College District, and two high schools

Projects in the amount of $295,614 were completed or terminated during the year from an earlier funding period:

Titles	Principal Investigator and Institution
Vocational Information System Model	Chancellor's Office of the California Community Colleges
Training in Management and Information Systems for Vocational Education in California Community Colleges	Otto A. Heinkel, San Diego Community College District
Evaluation Model Development for Marine Technology Programs	Otto A. Heinkel, San Diego Community College District
A Research Project to Test a Coordinated Instruction Employment Counseling System Focusing on Student Adjustment to Work	Jacob Wiens and Joan Lewis, San Mageo Community College District
The Ventura County Manpower Projection Model: Phase I	William H. Lawson and John Van Vant Ventura County Office of Education and Ventura Community College District
A Field Study to Determine Characteristics of Most Successful Vocational Education Programs	Walter Brooks Napa Community College District
San Francisco Bay Area Environmental Education Needs Study	Duane Fish West Valley Community College District

Disadvantaged Programs (Part A of VEA)

Of 72 California Community Colleges projects requesting approximately $3.5 million, 48 were recommended for funding in the amount of $961,800. Special attention was given to projects of target areas where unemployment and drop-out rates demonstrated potential need for disadvantaged type programs and support services. Special emphasis was given to projects which assisted the training for employment by maintaining a high support level through basic skills and counseling. Services ranged from recruitment and tutoring through systematic occupational guidance, which emphasized career education. Modification of courses ranged from bilingual instruction (English and Spanish) for jobs where opportunities are known to exist in the community to redesigning an aeronautics

curriculum to permit individual progression.

A serious approach to the problems of the disadvantaged has resulted in more placement-oriented projects with practical, attainable goals. The concern has spread to include general training for youth drop-out and unemployed as well as specific skills for retrainable adults with special needs. Overall objectives have been to modify programs to result in meaningful placement.

Exemplary Programs and Projects (Part D of VEA)

Exemplary occupational education programs were conducted in four California Community College Districts: Los Angeles, Pasadena, San Mateo and Yuba. The projects conducted by these districts involved a total project commitment of $94,778.

Consumer and Homemaking Education (Part F of VEA)

During 1971-72, provision was made to orient a limited number of specialists experienced in consumer and homemaking education programs to the Community College Occupational Programs Evaluation System. As a part of the overall COPES project description for 1972-73, the emphasis on consumer and homemaking education was expanded.

This added attention was the outgrowth of a need identified by the Chancellor's Office for continuing attention to changes that have taken place in consumer and homemaking education in California Community Colleges. Such information is valuable in helping to determine future directions for the Chancellor's Office.

Initially, the consumer and homemaking education part of the COPES project for 1972-73 was assigned two objectives: to assess major strengths and needs for improvement in such programs and services offered by California Community Colleges and to train additional personnel in application of the system, particularly as it pertains to consumer and homemaking education. As a result,

a new--and unscheduled--COPES evaluation subsystem was developed, both for obtaining perceptions required for the assessment and, with additional time devoted to refinements, for future applications focusing on consumer and home-making education. Thus, what began as part of a project, became a project in itself.

The following Outreach Projects under Part F of VEA were developed:

1. Consumnes River College (Sacramento) -- Consumer education media series consisting of slides and audio cassettes developed in Spanish and English, including leader's guides, brochures with consumer tips and an evaluation form.
2. American River College (Sacramento) -- CASH program (Consumer Activities and Services to Homemakers).
3. Fullerton College (North Orange County) -- Brochure entitled "Consumer Concerns" made available to residents in the North Orange Community College District.
4. Cuesta College (San Luis Obispo County) -- Caring and Sharing Program for Homemakers in Spanish and English.

Cooperative Vocational Education (Part G of VEA)

Twenty-four California Community College districts were funded for Part G projects in 1972-73 in the amount of $292,755, with 5,653 students involved. This portion of the occupational education program is providing valuable experiences for participating students.

Work-Study Programs (Part H of VEA)

Work-study programs were offered in 33 California Community College districts during 1972-73, including 42,493 male students and 6,945 female students benefiting from the programs, at a total project commitment of $202,820.

Model Programs

Agriculture Education. Modesto College has an outstanding agriculture department

and one of its finest programs is ornamental horticulture. This is a three-phased program giving emphasis not only to ornamental horticulture in general but also to landscape installation and maintenance as well as nursery sales and production.

The funding source for the program is similar to most occupational programs in that funds are received from VEA, the state, and local funds. Persons served by the program are many and vary in age from those recently out of high school to senior citizens with wide range of incomes. (20 percent of the income in this area is below $3,000 per year.)

There are 70 declared ornamental horticulture majors in the program, with approximately 98 students from other disciplines taking advantage of these ornamental horticulture classes. Of the 70 majors, 12 are females. The numbers of freshmen and sophomores are quite evenly matched. The kinds of services provided illustrate the type of program being presented. The services provided students are not only helpful, but essential to the effectiveness of the program: financial aid to disadvantaged students from EOPS, scholarships, and work study; work experience, both paid and non-paid; tutoring by peers; and placement of students.

Emphasis of the instruction is the "hands on" theory of education. Students are expected to grasp not only the "why" of what is being learned but also the "how" in being able to demonstrate the skills and knowledge needed to succeed in the world of work. This is accomplished through lectures, labs, work experience, and a fine working relationship with the ornamental industry of the community.

Students spend about 15 hours a week in ornamental horticulture courses. Students' needs may be met by completing one or two courses, or they may continue until a certificate or A.A. degree is completed. The programs usually take two years to complete. The retention rate of the students is approximately 55 percent at the end of a two-year period. The placement rate of the students who "spin

off" as job-ready trainees and those who complete the program is outstanding when compared to most programs. Approximately 95 percent of the students are being placed on jobs at this time.

Job entry salaries range from a low of $475 a month to $600. As more experience and expertise are gained, much higher salaries are received. Some of the students are receiving $1,400 per month after three years in the field.

Consumer and Homemaking Education. A 3-Unit Community College credit course, composed of 45 1/2-hour television programs, "The Great Consumer Contest," is offered by the Consumer Education TV Series by the Southern California Consortium of Community Colleges Television. Of the many viewers, 4,622 have registered for credit, with the following Community Colleges and enrollments:

Bakersfield	429
Cerritos	329
College of the Canyons	5
College of the Desert	24
Compton	59
El Camino	269
Fullerton	119
Glendale	150
Golden West	211
Long Beach City	140
Los Angeles District	1,430
Mt. San Antonio	266
Orange Coast	242
Pasadena	234
Rio Hondo	167
Riverside	165
Santa Ana	134
Santa Monica	216
Taft	33

The funding source is $20,000 from Part F, Consumer and Homemaking Education, of the Vocational Education Act. The program includes one semester of 18 weeks, 3 times a week, twice a day.

The course is designed for the general public and places specific emphasis on problems associated with teens, young adults, newly formed families, and early, middle, and late years of adult life. Course objectives, which provide

referents for evaluation of each of the 45 television programs and related activities, are as follows: classify consumer choices of needs versus wants, order consumer decisions according to rational priorities, identify sources and techniques appropriate to solutions of consumer problems, identify avenues of participation in the legislative process as they affect consumers, and describe the steps involved in applying comparative shopping techniques to specific purchases.

Technical Education. A marine diving technology program is offered at Santa Barbara City College with local district funds supplemented with VEA, Part B. In 1972-73 50 freshmen and 46 sophomores participated.

The required marine technology courses are seamanship and small boat handling, basic diving, advanced diving, fundamentals of marine engines and compressors, underwater construction, underwater operations, and diving systems. Recommended electives are summer work experience and independent study. The marine technology courses are supplemented with biology, earth science, drawing and blueprint reading, welding, machine shop, electronics, as well as the general education requirements.

Students spend about four hours in lecture and eight hours in lab each semester for the marine technology courses only. Included in this is considerable time devoted to diving, seamanship, operation and maintenance of marine engines and diving compressors, and off-shore and marine construction operations.

Highlights of the program include student retention and student placement. Of 28 second year students, fall 1971, 25 completed the program requirements in spring 1972. Twenty of these have been placed in the marine industry. Eight are employed outside the United States working for large diving service companies. Eighteen of the 20 placed are working outside California. The attrition rate has lowered from 45% with the 1970 class to 10% for the 1973 class. Continued

improvement of student applicant screening techniques, curriculum updating, success of graduates of the programs, and the enthusiasm and motivation of the faculty and students are contributing factors affecting the low rate of student attrition. A highlight of the last academic year was the acceptance of a gift from General Motors Corporation, the DOWB (Deep Ocean Work Boat). The DOWB will be used to train students in submersible technology and has a working depth of 6,500 feet and carries a crew of three. The craft has logged 386 hours of submerged time to depths up to 6,400 feet.

This program is the only one of its kind in California.

Public Service Education. Community Social Services--Social Gerontology is offered at Merritt College in Oakland with funds from the Vocational Education Act plus local funds. Two hundred students enrolled last year. Seventy percent are from minorities, and an equally high number are women. Ages are from 20 to 50, with the average around 30.

Objectives of the program are to enlarge the perspectives with which adults look at American society and its social institutions; increase vocational options, particularly for disadvantaged persons but also for adults looking for new careers; tap the wealth of human resources in the many persons who come to the Community College, mobilize their strengths and insights into disciplined service workers and activists for peaceful social change; and provide training and education for workers already on jobs or for persons seeking careers in human services by offering a core curriculum containing skills training and academic work that will permit lateral as well as upward mobility both educationally and vocationally.

Instructional content and other services:

Group Dynamics 3 units. Theory and practice of small, task oriented groups through participation.

Planning for the Later Years 2 units. Concern with retirement planning: practical information.

Social Gerontology: Aging and the Individual 2 units. Physical, emotional, social, and economic perspective of aging.

Social Gerontology: Working with Older Adults 2 units. The social aspects of aging; workers' responsibilities of understanding new roles and activities.

Working with Older Persons in Institutional Settings 3 units. Understanding older persons living in congregated housing.

Community Organization and Services for Older Adults 2 units. State, local federal services, roles for private citizens, theory and techniques of community organization.

Older adults and Political Power 2 units. More effective approaches in expressing needs of older adults, influencing public change, skills in legislative action.

Field Instruction
Students work in field experience in drug programs, creative living centers for the mentally ill and mentally retarded, school community work, juvenile hall and other correctional settings, community public health, and residential care facilities for the aged and mentally retarded.

Follow-up of students indicate that they continue in their jobs, increasingly with upward mobility, or transfer to four-year institutions, or take jobs such as that in juvenile hall, Social Security Administration, and model cities projects. This program makes available on the widest possible basis the concepts of gerontology,--to individuals preparing for new lives after retirement, to personnel in government and private industry planning for retirement, and to the hundreds of institutional and other workers (many of minority groups) who need training and upgrading.

Therapeutic recreation is offered at De Anza College in Cupertino with funds from the Vocational Education Act plus local funds. 297 students are enrolled, with ages from 17 to 60 years. Many have background in nursing. This is an occupational training program to train persons to work as recreation therapy activity leaders. Therapeutic recreation is a special service within the broad area of recreation services. It is the process which uses recreation services for purposive intervention in some physical, emotional, or social behavior to bring about a desired change in that behavior and to promote the growth and

development of the individual. Therapeutic recreation provides opportunities for participation on one's own volition in activities that bring pleasure or other positive personal rewards.

Therapeutic recreation should employ activities as nearly like those for the non-handicapped as possible, with adaptations as necessary so that each person, regardless of his limitations, may participate actively and to his fullest capacity. Whenever feasible, the handicapped should have opportunities to participate with the non-handicapped. Therapeutic recreation fieldwork and employment includes hospitals, nursing homes, half-way houses, mental health facilities, community handicapped groups, municipal recreation departments for handicapped and schools with special classes.

This program is an option to a two-year recreation leadership program or on completion of the specific courses, a Certificate of Proficiency-Activity Director Convalescent Homes, is given. Therapeutic Recreation courses include the following:

Recreation for the Physically Handicapped: 3 units. Theory and activity emphasizing leadership of social, recreational, and sports for physically handicapped children, teenagers, adults, and the aged.

Recreation for the Mentally and Emotionally Handicapped: 3 units. Theory and activity leadership of social and recreational activities for mentally and emotionally handicapped children, teenagers, adults, and the aged.

Recreation Services in Convalescent Hospitals: 3 units. Goals, techniques and procredures for the recreation practitioner to conduct recreation at a supervisory level in a convalescent hospital or nursing home. Must have concurrent supervised fieldwork.

Fieldwork: 5 units. Subsequent to completion of all required courses and recommendation of college staff. Placement by staff in approved agency. Three day seminar concludes course.

Recreation Leadership - courses to complete Associate Degree program

Introduction to Recreation and Leisure Services 3 units

Group Leadership 3 units

Camping and Outdoor Recreation 3 units

Community Recreation 3 units

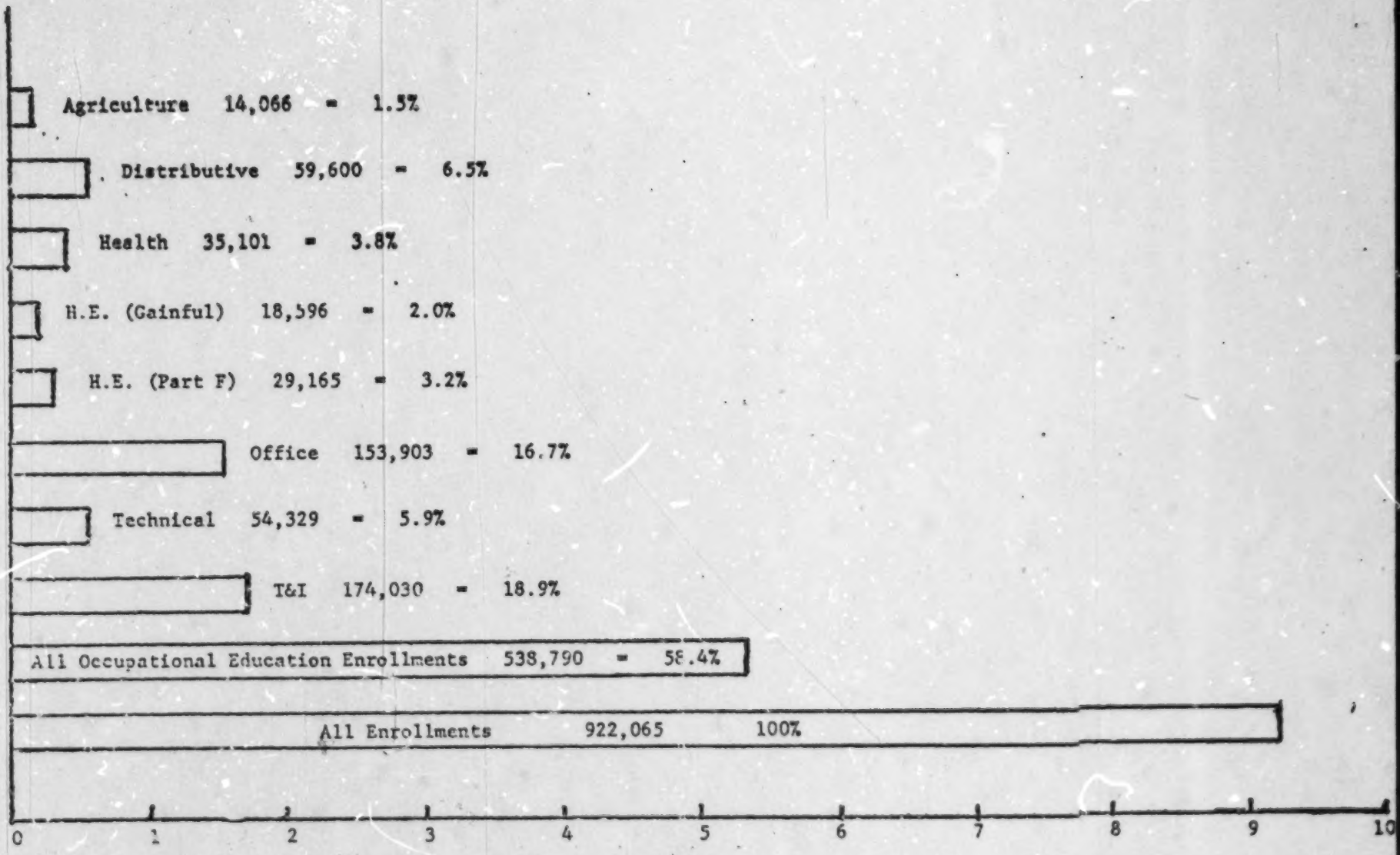
Recreation Agency 3 units. Sixty hours observing, and evaluation of twelve public, voluntary, and private agencies and twelve hours in seminar.

Classes for the certificate program meet on extended day basis, and all students are currently employed in convalescent hospitals or nursing homes. The only costs to students are those normal for matriculation to the college.

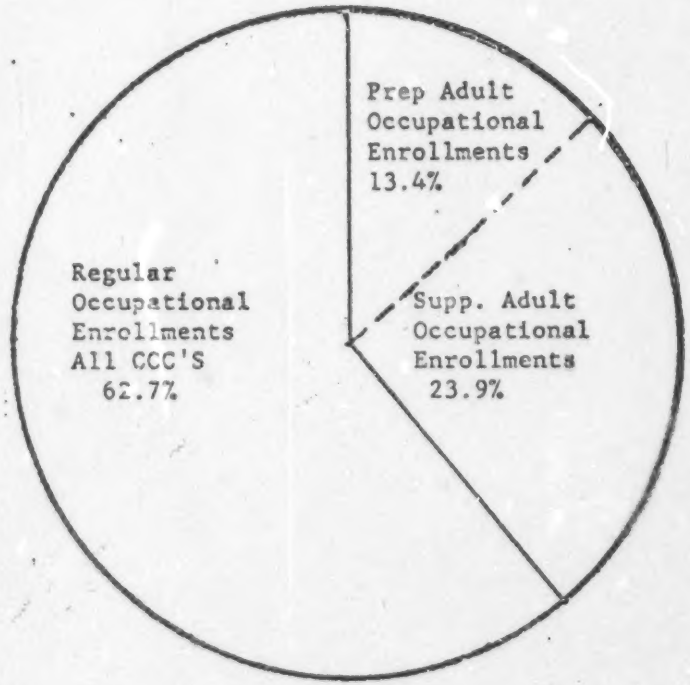
TABLE
Data on Community College Vocational Education Programs
in California, 1972-73

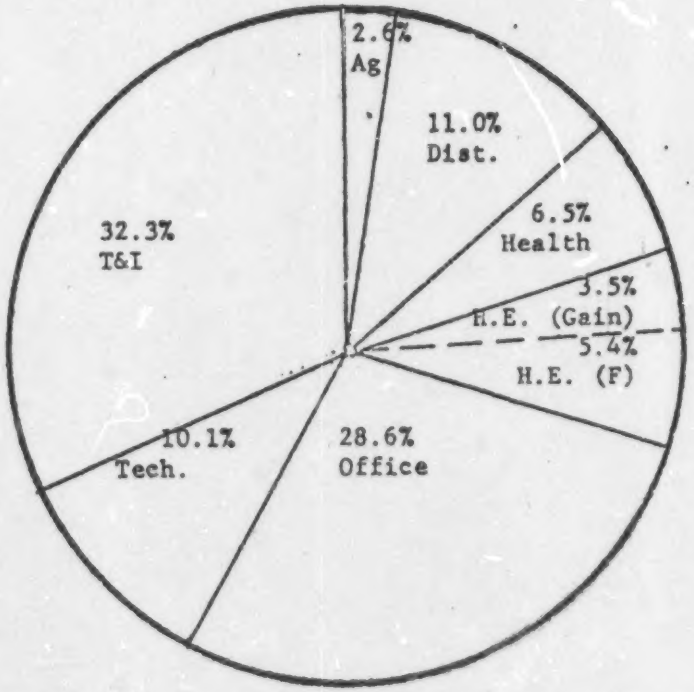
Program	Number of Programs	Enrollments	Percentage of Total Postsecondary Enrollment	Percentage of Total Day Spent in Program	Number of Program Completions
01. Agriculture Education	235	14,066	1.5	60	3,480
04. Distributive Education	190	59,600	6.5	40	15,401
07. Health Occupations Education	341	35,101	3.8	82	10,745
09. Home Economics		18,596(Gainful)	2.0	25	4,386
Occupational Education	109	29,165(Part F)	3.2	--	--
14. Office Education	352	153,903	16.7	68	43,330
16. Technical Education	160	54,329	5.9	75	11,556
17. Trade and Industry	684	174,090	18.9	75	31,899
Total	2,071	538,790	58.5	--	120,797

Note: Figures used in this table are based on enrollments reported to the Chancellor's Office for 1971-72 and increased by an estimated 2.5 percent for 1972-73. Program completions based upon reports for 1971-72 with an estimated increase of 3.5 percent for 1972-73.



All California Community College Enrollments





Occupational Enrollments
California Community Colleges.

TOTAL ENROLLMENTS

Adults - Prep.	72,406	=	13.4%
Adults - Supp.	128,581	=	23.9%
Adults - Total	200,987		
Regular Students	337,803	=	62.7%
Occupational Education total	538,790		

PROGRAM ENROLLMENTS

Agriculture	14,066	=	2.6%
Distributive	59,600	=	11.0%
Health	35,101	=	6.5%
H.E. (Gainful)	18,596	=	3.5%
H.E. (Part F)	29,165	=	5.4%
Office	153,903	=	28.6%
Technical	54,329	=	10.1%
T&I	174,030	=	32.3%